Application No.: 10/065,919

Docket No.: 9817-US-PA

In The Claims:

Claim 1. (currently amended) A re-oxidation process of a semiconductor device,

comprising:

providing a substrate having a stacked structure thereon, wherein the stacked structure

includes a polysilicon/tungsten silicide interface;

forming a CVD oxide layer on both the substrate and the stacked structure with a

chemical vapor deposition (CVD) process; and

performing an oxidation process to form a thermal oxide layer on both the substrate and

the stacked structure.

Claim 2. (original) The re-oxidation process of claim 1, wherein the stacked structure

includes a stacked gate that comprises, from bottom to top, a tunneling layer, a polysilicon

floating gate, an inter-poly dielectric layer, a polysilicon control gate and a tungsten silicide layer.

Claim 3. (original) The re-oxidation process of claim 1, wherein the stacked structure

includes a stacked gate that comprises, from bottom to top, a gate dielectric layer, a polysilicon

gate and a tungsten silicide layer.

Claim 4. (original) The re-oxidation process of claim 1, wherein the CVD process is a

low-pressure chemical vapor deposition (LPCVD) process or a plasma-enhanced chemical vapor

deposition (PECVD) process.

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Claim 5. (original) The re-oxidation process of claim 1, wherein the CVD oxide layer is

formed using silane (SiH<sub>4</sub>), tetraethyl-ortho-silane (TEOS) or dichlorosilane (SiH<sub>2</sub>Cl<sub>2</sub>) as a Si-

source.

Claim 6. (original) The re-oxidation process of claim 1, wherein the CVD oxide layer has

a thickness from 30Å to 120Å.

Claim 7. (original) The re-oxidation process of claim 1, wherein the oxidation process is

conducted under O<sub>2</sub>, H<sub>2</sub>O or O<sub>2</sub>/H<sub>2</sub>O atmosphere.

Claim 8. (original) The re-oxidation process of claim 1, wherein the oxidation process is

conducted in a batch-type or single wafer-type reaction chamber.

Claim 9. (currently amended) A method for fabricating a semiconductor device,

comprising:

sequentially forming a tunneling layer, a first polysilicon layer, an inter-poly dielectric

layer, a second polysilicon layer and a tungsten silicide layer on a substrate;

sequentially patterning the tungsten silicide layer, the second polysilicon layer, the inter-

poly dielectric layer and the first polysilicon layer to form a stacked gate;

forming a CVD oxide layer on both the substrate and the stacked gate with a chemical

vapor deposition (CVD) process; and

performing an oxidation process to form a thermal oxide layer on both the substrate and

the stacked gate.

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Claim 10. (original) The method of claim 9, wherein the CVD process is a low-pressure

chemical vapor deposition (LPCVD) process or a plasma-enhanced chemical vapor deposition

(PECVD) process.

Claim 11. (original) The method of claim 9, wherein the CVD oxide layer is formed

using silane (SiH<sub>4</sub>), tetraethyl-ortho-silane (TEOS) or dichlorosilane (SiH<sub>2</sub>Cl<sub>2</sub>) as a Si-source.

Claim 12. (original) The method of claim 9, wherein the CVD oxide layer has a thickness

from 30Å to 120Å.

Claim 13. (original) The method of claim 9, wherein the oxidation process is conducted

under O<sub>2</sub>, H<sub>2</sub>O or O<sub>2</sub>/H<sub>2</sub>O atmosphere.

Claim 14. (original) The method of claim 9, wherein the oxidation process is conducted

in a batch-type or single wafer-type reaction chamber.

Claim 15. (currently amended) A re-oxidation process of a semiconductor device,

comprising:

providing a substrate having a stacked structure thereon, wherein the stacked structure

includes a polysilicon/metal silicide interface;

forming a CVD oxide layer on both the substrate and the stacked structure with a

chemical vapor deposition (CVD) process; and

performing an oxidation process to form a thermal oxide layer on both the substrate and

the stacked structure.

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Claim 16. (original) The re-oxidation process of claim 15, wherein the stacked structure

includes a stacked gate that comprises, from bottom to top, a tunneling layer, a polysilicon

floating gate, an inter-poly dielectric layer, a polysilicon control gate and a metal silicide layer.

Claim 17. (original) The re-oxidation process of claim 15, wherein the stacked structure

includes a stacked gate that comprises, from bottom to top, a gate dielectric layer, a polysilicon

gate and a metal silicide layer.

Claim 18. (original) The re-oxidation process of claim 15, wherein the CVD process is a

low pressure chemical vapor deposition (LPCVD) process or a plasma enhanced chemical vapor

deposition (PECVD) process.

Claim 19. (original) The re-oxidation process of claim 15, wherein the CVD oxide layer

is formed using SiH<sub>4</sub>, tetraethyl-ortho-silane (TEOS) or dichlorosilane (SiH<sub>2</sub>Cl<sub>2</sub>) as a Si-source.

Claim 20. (original) The re-oxidation process of claim 15, wherein the CVD oxide layer

has a thickness from 30Å to 120Å.

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